

# **XP-K7V400**

AMD Socket A Processor Motherboard

User's Manual

M-040502

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To avoid unnecessary errors of operation, please consult the user manual prior to hardware installation. For more up-to-date information, please link to our company website at <http://www.xper.com>

Prior to beginning installation procedures, please make sure that your computer turned off and is connected to a grounded power outlet. If your system is not turned off during installation, this could result in harm or damage to the motherboard, the components as well as to the user.

### Declaration of Conformity

We, Manufacturer/Importer  
**Gigatrend Technology Co., Ltd.**  
 Ausbacher Weg 41, IT 35377 Herborn, Germany  
 declare that the product  
**Motherboard**  
**XP-K7V400**  
 is in conformity with  
 (reference to the specification under which conformity is declared)  
 in accordance with 89/339 EEC (EMC) Directive

- |  |  |  |  |
|--|--|--|--|
| <input type="checkbox"/> EN 55011                    | Limits and methods of measurement of radio interference characteristics of industrial, scientific and medical (ISM) RF frequency equipment                 | <input checked="" type="checkbox"/> EN 10106-3-2 | Disturbance in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations" |
| <input type="checkbox"/> EN 55013                    | Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment                                     | <input checked="" type="checkbox"/> EN 55024     | Information Technology equipment immunity characteristics-Limits and methods of measurement                          |
| <input type="checkbox"/> EN 55014-1                  | Limits and methods of measurement of radio disturbance characteristics of household electrical appliances, portable tools and similar electrical apparatus | <input type="checkbox"/> EN 50082-1              | Generic immunity standard Part 1: Residential, commercial and light industry   |
| <input type="checkbox"/> EN 55015                    | Limits and methods of measurement of radio disturbance characteristics of broadcast transmitters and facilities  | <input type="checkbox"/> EN 50082-2              | Generic immunity standard Part 2: Industrial environment   |
| <input type="checkbox"/> EN 55016                    | Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment                                     | <input type="checkbox"/> EN 55014-2              | Immunity requirements for household appliances tools and similar apparatus   |
| <input type="checkbox"/> EN 55020                    | Immunity from radio interference of broadcast receivers and associated equipment   | <input type="checkbox"/> EN 50091-2              | EMC requirements for uninterruptible power systems (UPS)   |
| <input type="checkbox"/> EN 55022                    | Limits and methods of measurement of radio disturbance characteristics of information technology equipment   |  |  |
| <input type="checkbox"/> EN VDE 0815 Part 10 Part 12 | Cable distribution systems; Equipment for receiving and/or distribution from sound and television signals  |  |  |

#### CE marking



The manufacturer also declares the conformity of above mentioned product with the actual legal limit safety standards in accordance with LVD 73/231 EEC

- |                                   |   |                                     |   |
|-----------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> EN 60965 | Safety requirements for mains operated electronic and related apparatus for household and similar general use | <input type="checkbox"/> EN 60950   | Safety for information technology equipment including electrical business equipment |
| <input type="checkbox"/> EN 60335 | Safety of household and similar electrical appliances   | <input type="checkbox"/> EN 50091-1 | General and Safety requirements for uninterruptible power systems (UPS)             |

#### Manufacturer/Importer

Signature: Timmy Huang

(Stamp)

Date: Jun. 18, 2004

Name: Timmy Huang

## DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2.1077(a)



Responsible Party Name: Gigatrend Technology Co., Ltd

Address: 1735R Railroad Street  
City of Industry, CA 91748(U.S.A.)

Phone/Fax No. (818) 854-9338/ (818) 854-9339

hereby declares that the product

**Product Name:** Motherboard

**Model Number:** XP-K7V400

Conforms to the following specifications:

FCC Part 15, Subpart B, Section 15.107(a) and Section 15.100(a),  
 Class B Digital Device

#### Supplementary Information:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful and (2) this device must accept any interference received, including that may cause undesired operation.

Representative Person's Name: ERIC LU

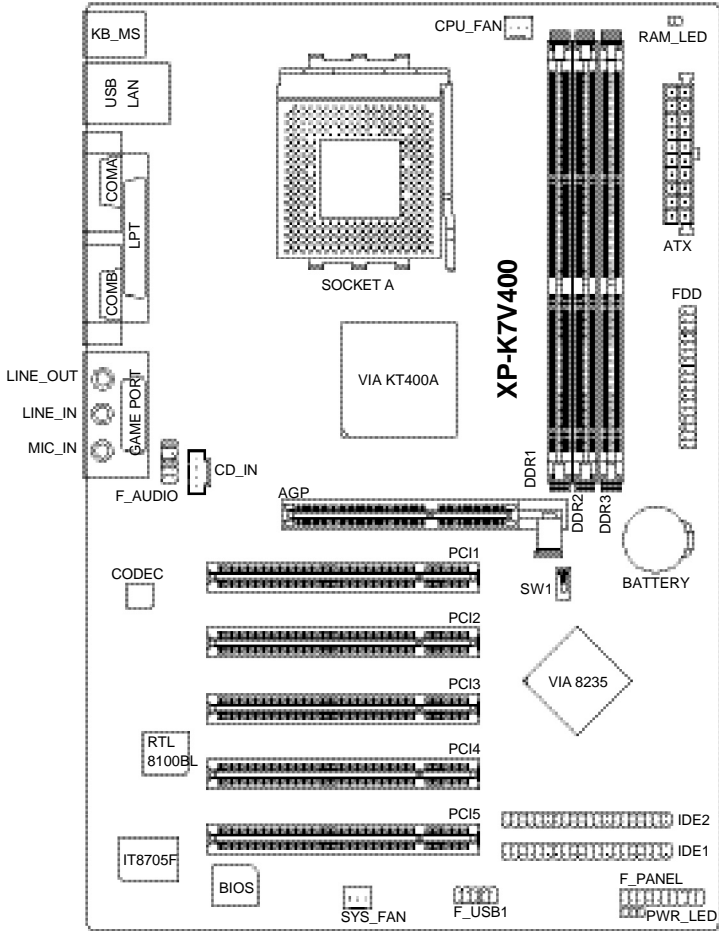
Signature: ERIC LU

Date: Jun. 18, 2004


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# Motherboard Layout



# 1. Production Introduction

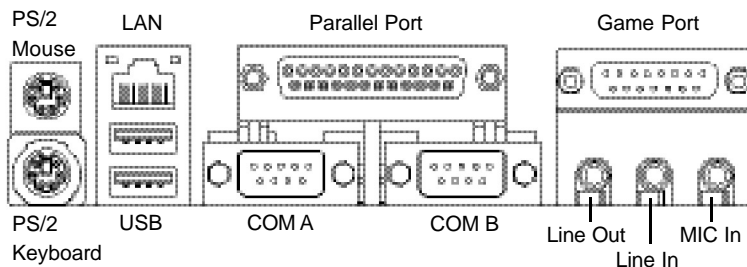
The user manual provides steps related to quick installation. If you wish to view complete product information, please select the , Open User Manual button located on the driver CD or link to our website at <http://www.axper.com> to received the most up-to-date information.

## 1.1. Feature Summary

CPU	Socket A for AMD Athlon™ XP/Athlon™/Duron™ processor 333/266MHz FSB Supports 1.4GHz and faster
Chipset	North Bridge: VIA KT400A South Bridge: VIA VT8235
Memory	3 184-pin DDR DIMM sockets, support up to 3GB DRAM (Max) Supports DDR400/DDR333/DDR266 DIMM Supports only 2.5V DDR SDRAM
Slots	1 AGP slot 4X/8X (1.5V) device support 5 PCI slots support 33MHz & PCI 2.2 compliant
On-Board IDE	2 IDE controller provide IDE HDD/CD-ROM(IDE1, IDE2) with PIO, Bus Master (Ultra DMA33/ATA66/ATA100/ATA133) operation modes Can connect up to 4 IDE devices
On-Board Floppy	1 Floppy port supports 2 FDD with 360K, 720K,1.2M, 1.44M and 2.88M bytes
On-Board Peripherals	1 Parallel port supports Normal/EPP/ECP mode 2 Serial port (COMA, COMB) 4 USB 2.0/1.1 ports (2 x Rear, 2 x Front by cable) 1 Front Audio connector 1 PS/2 Keyboard 1 PS/2 Mouse
On-Board LAN	Built-in RTL8100BL chipset 1 RJ45 port
On-Board Sound	ALC655 CODEC Support 2/4/6 channel Line Out / Line In / Mic In CD In / Game Port
BIOS	Licensed AWARD BIOS Supports BIOSNow!
I/O Control	IT8705F
Hardware Monitor	System voltage detect CPU/System temperature detect CPU/System fan revolution detect CPU/System fan failure warning CPU thermal shutdown function
Form Factor	ATX size form factor, 294.005mm x 200.025mm

## 1.2. I/O Back Panel and Connectors & Jumper Setting

### 1.2.1. I/O Back Panel



PS/2 Keyboard / PS/2 Mouse	Connects PS/2 standard keyboard and PS/2 standard mouse
USB (Universal Serial Bus Port)	Prior to use, please make sure that your system as well as the connected attachments support the USB interface. If driver installation is required, please consult the USB section of the user manual.
LAN (RJ45 LAN Port)	Internet connection with speed of up to 10/100Mbps
Parallel port (LPT)	Connects to printer
COMA/COMB (Serial port)	Connects to serial-based mouse or data processing devices
Game Port	Connects to joystick device
LineOut	Connects to speakers or headphones
Line In	Connects to optical devices, CD players and other audio input devices
Mic In	Connects to microphone

### 1.2.2. Connectors & Jumper Setting

#### SW1 (System Jumper)

System clock can be adjusted to 100/133/166MHz. SW1 allows you to adjust the system clock.



ON: 100MHz (supports FSB 200MHz CPU, default)



OFF: Auto (133/166MHz, supports FSB 266/333MHz CPU)

**CAUTION**

If you are using a FSB 266MHz or 333MHz CPU, please set the jumper to OFF (133/166MHz).

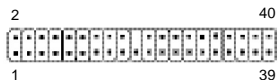
#### FDD (Floppy Disk Drive Connector)

The FDD connector is able to connect a single floppy disk drive via a FDD cable. Usually one edge of the FDD cable is marked in red, please attach this marked edge to position 1 on the connector.



### IDE1 / IDE2 (IDE1 and IDE2 Connector)

The IDE connector is able to connect two IDE devices via an IDE cable and requires checking of the IDE jumper setting. It is recommended that the hard drive be connected to the first IDE connector while the optical drive be connected to the second IDE connector.



### CPU\_FAN (CPU Fan Power Connector); SYS\_FAN (System Fan Power Connector)

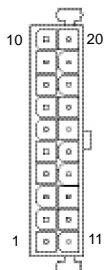
The CPU\_Fan power connector provides the largest amount of power to the CPU fan at 600mA. You can connect the casing fan to the SYS\_FAN connector to enhance system cooling.



PIN	SIGNAL
1	GND
2	+12V
3	Sense

### ATX (ATX Power Connector)

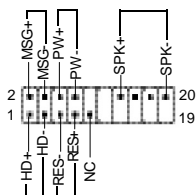
The ATX power connector provides power to the motherboard. Prior to connection, please make sure that the power supply is disconnected.



PIN	SIGNAL	PIN	SIGNAL
1	3.3V	11	3.3V
2	3.3V	12	-12V
3	GND	13	GND
4	VCC	14	PS_ON (soft on/off)
5	GND	15	GND
6	VCC	16	GND
7	GND	17	GND
8	Power Good	18	-5V
9	5VSB (stand by +5V)	19	VCC
10	+12V	20	VCC

### F\_PANEL (Front Panel Control Connector)

The F\_Panel Control Connector connects to certain connectors on the front panel of the system casing such as IDE Hard Disk Active LED, speaker, reset, and power on/off connectors. You can use the schematic diagram below as the basis for connection.



PIN	SIGNAL
HD	IDE Hard Disk Active LED
SPK	Speaker Connector
RES	Reset Switch
PW	Power Switch
MSG	Message LED/Power/Sleep LED
NC	NC

### PWR\_LED

Connects to the system power LED indicator whereby the power is indicated as ON or OFF. However, the indicator will flash when the system is suspended.



PIN	SIGNAL
1	MPD+
2	MPD-
3	MPD-

## RAM\_LED

When the RAM\_LED is lit, please do not remove the memory since there is still power being supplied to the component. Short circuiting or hardware damage may occur if memory is removed with the RAM\_LED is still lit. Please remove the power plug before removing the memory.



## F\_AUDIO (Front Audio Connector)

Connects to the audio connector located on the front panel of the system casing (dependent on case design). When use of the front panel audio connector is required, please remove the 5-6 pin, 9-10pin jumper. Please note that use of only the front panel audio connector or the rear panel audio connector is permitted.



PIN	SIGNAL	PIN	SIGNAL
1	MIC	6	Rear Audio (R)
2	GND	7	Reserved
3	MIC_BIAS	8	NO PIN
4	POWER	9	Front Audio (L)
5	Front Audio (R)	10	Rear Audio (L)

## CD\_IN (Optical Drive Audio Connector)

Connects CD-ROM or DVD-ROM audio connector.



PIN	SIGNAL
1	CD_L
2	GND
3	GND
4	CD_R

## F\_USB1 (Front USB Connector)

Connects to the USB connector located on the front panel of the system casing (dependent on case design). Note: Please make sure that each USB connection matches its designated position. If connections are made incorrectly, the result can lead to inability to use the function or even damage.



PIN	SIGNAL	PIN	SIGNAL
1	POWER	6	USB Dy+
2	POWER	7	GND
3	USB Dx-	8	GND
4	USB Dy-	9	NO PIN
5	USB Dx+	10	NC

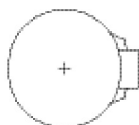
## BATTERY (Battery)

The improper removal of the battery can result in harm. When replacing a battery, please make sure you use one that is of similar brand and model number.

For information related to battery specifications and precautions, please refer to the manufacturer instructions.

If you wish to delete the data stored in the CMOS, please follow the steps below:

1. Please turn off your computer and unplug the power.
2. Remove the battery from the motherboard.
3. Wait 30 seconds and then replace the battery onto the motherboard.
4. Plug in the power supply and turn on your system.



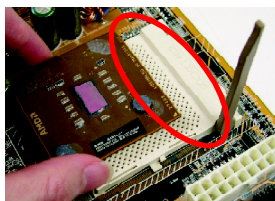


## 2. Hardware Installation

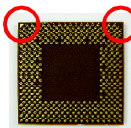


1. Please make sure that the CPU used is supported by your motherboard.
2. Please be aware of the placement position of the CPU. If the CPU does not insert properly, do not apply force but check the placement position.
3. Please make sure that an even layer of heat sink paste is added between the CPU and the fan sink.
4. Please do not turn on the power prior to installing the fan sink. Doing so can result in overheating and lead to permanent damage to the CPU.
5. Please follow the CPU specifications when setting the frequency. It is not recommended that system speed settings exceed that of hardware specifications. If you wish to set your system speed to exceed the recommended specifications, please check your hardware specifications eg: CPU, graphics card, memory, hard drive

### 2.1. Installation of a Socket A CPU and Fan Sink

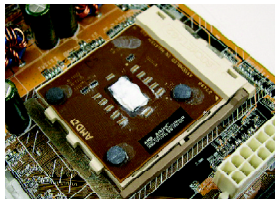


- 1  
Note the small gold colored triangle on one corner of the CPU. Place the triangle in the corner closest to the metal lever and gently insert the CPU into its position.

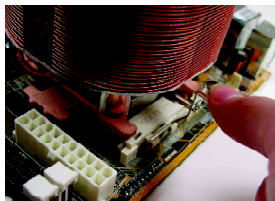


**NOTE**

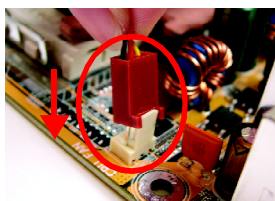
A Socket A CPU has two indented corners and these corners must be properly positioned during installation.



- 2  
When the CPU is inserted into its position, gently press the metal lever downwards until a click is heard. Then add an even layer of heat sink paste between the CPU and fan sink for heat dissipation.



- 3  
Position and attach the clips on one end of the fan sink firmly atop the CPU. Please do the same for the clips on the other end of the fan sink.



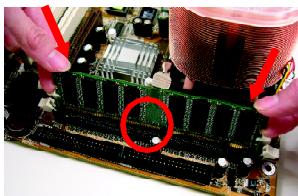
- 4  
Connect the 3-pin cooler power connector to the CPU Fan connector located on the motherboard.

## 2.2. Installation of Memory

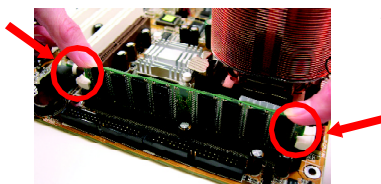


1. Before installing or removing memory, please make sure that the computer power is turned off to prevent hardware damage.
2. Please make sure that the memory used is supported by the motherboard.
3. Memory modules have a foolproof insertion design. The memory can be installed only when facing the correct position. If you cannot insert the module, please switch directions.
4. It is recommended that memory of similar capacity, specifications and brand be used.

The motherboard supports DIMM memory modules, whereby BIOS will automatically detect memory capacity and specifications. Memory modules are designed so that they can be inserted only in one direction.



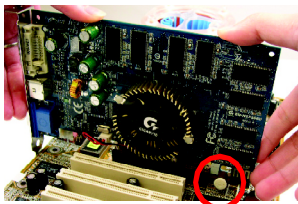
1. Unfasten the clips on each end of the memory slots. Correctly align the memory module in the slot and push downwards..



2. Once the memory module is correctly inserted, the clips will automatically refasten. If the memory module is positioned in the wrong direction, it will not insert. If this occurs, please switch directions.

## 2.3. Installation of the Graphics Card

1. Before installing the graphics card, please carefully read the accompanying user manual. As well, make sure the computer power is turned off.
2. Your graphics card must be 1.5V and support the AGP4X specification.
3. When installing or removing the graphics card, first pull out the white AGP knob before insertion or removal. Releasing the AGP knob will hold the graphics card firmly in place.



### 3. BIOS Setup

BIOS (Basic Input and Output System) stores all the information of the motherboard settings that is needed for system initiation within the CMOS. The CMOS SETUP utility allows the user to make changes in BIOS configurations that are required or to activate certain features. The CMOS SETUP saves each item configuration in the CMOS SRAM of the motherboard. When the power is turned off, the battery on the motherboard supplies the required power to the CMOS SRAM.

When the power is turned on, pushing the <Del> button during the BIOS POST (Power-On Self Test) will bring up the CMOS SETUP screen. If you wish to enter the BIOS setup, please press "Ctrl + F1" at the BIOS setup screen.

When using BIOS setup for the first time, it is recommended that you save the present BIOS onto a disk in case you need to reset the BIOS back to its original settings. If you wish to update to a new BIOS, the "BIOSNow!" can be used.

The user can select "BIOSNow!" as a way to quickly and easily update or back up BIOS without entering the operating system.

#### 3.1. Setup Screen Features (BIOS version:E2)

- ※ When you enter the CMOS SETUP screen, you will see the following screen and setting selections as shown below.

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software	
<ul style="list-style-type: none"> <li>▶ Standard CMOS Features</li> <li>▶ Advanced BIOS Features</li> <li>▶ Integrated Peripherals</li> <li>▶ Power Management Setup</li> <li>▶ PnP/PCI Configurations</li> <li>▶ PC Health Status</li> <li>▶ Frequency/Voltage Control</li> </ul>	<ul style="list-style-type: none"> <li>Load Fail-Safe Defaults</li> <li>Load Optimized Defaults</li> <li>Set Supervisor Password</li> <li>Set User Password</li> <li>Save &amp; Exit Setup</li> <li>Exit Without Saving</li> </ul>
ESC: Quit	↑↓→←: Select Item
F8: BIOSNow!	F10: Save & Exit Setup
Time, Date, Hard Disk Type...	

#### Instructions

- <↑, ↓, ←, →, Enter>      Movement in all four directions to highlight a desired option, pressing <Enter> will select the option and take you to its appropriate screen
- <Page Up, Page Down>    Used to toggle up and down the available options for a particular item, whereby <Page Up> can also be used to increase value option and <Page Down> to decrease value option
- <Esc>                         Return to main setup screen or exit setup
- <F1>                            Gives the list of options available for each item
- <F2>                            Gives the list of options available for the current item
- <F5>                            Returns settings to previous values (not applicable to main setup screen)

<F6>	Gives the list of options available for each item
<F7>	Return to Optimized default values (not applicable to main setup screen)
<F8>	Enters BIOSNow! feature
<F9>	Displays system information
<F10>	Saves settings and exits setup

## 3.2. Standard CMOS Features

- ✧ Includes the settings for items such as date, time, floppy disk drive specifications, and hard drives connected to the IDE interface.

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software  
Standard CMOS Features

		Item Help
Date (mm:dd:yy)	Sat, May 15 2004	Menu Level▶
Time (hh:mm:ss)	22:31:24	Change the day, month, year
▶ IDE Primary Master	[None]	<Week>
▶ IDE Primary Slave	[None]	Sun. to Sat.
▶ IDE Secondary Master	[None]	<Month>
▶ IDE Secondary Slave	[None]	Jan. to Dec.
Drive A	[1.44M, 3.5"]	<Day>
Drive B	[None]	1 to 31 (or maximum allowed in the month)
Floppy 3 Mode Support	[Disabled]	<Year>
Holt On	[All, But Keyboard]	1999 to 2098
Base Memory	640K	
Extended Memory	127M	
Total Memory	128M	
↑↓→←: Move    Enter: Select    +/-/PU/PD: Value    F10: Save    ESC: Exit    F1: General Help F5: Previous Values    F6: Fail-Save Default    F7: Optimized Defaults		

### ■ Date (mm:dd:yy)

Allows you to setup the date in the mm:dd:yy fashion.

### ■ Time (hh:mm:ss)

Allows you to set up the date in the hh:mm:ss fashion. The time must be entered in the 24-hour format.

### ■ IDE Primary Master(Slave) / IDE Secondary Master(Slave)

#### [IDE Device Setup]

IDE HDD Auto-Detection    Press "Enter" to select this option for automatic device detection.

IDE Primary Master(Slave) / IDE Secondary Master(Slave) IDE Device Setup. You can use one of three methods:

**Auto**                    Allows BIOS to automatically detect IDE devices during POST(default)

**None**                    Select this if no IDE devices are used and the system will skip the automatic detection step and allow for faster system start up.

**Manual**                User can manually input the correct settings

**Access Mode**        Use this to set the access mode for the hard drive. The four options are: CHS/LBA/Large/Auto(default:Auto)

Hard drive information should be labeled on the outside drive casing. Enter the appropriate option based on this information.

### ■ Floppy 3 Mode Support

Allows user to configure a Japanese standard 3 Mode floppy drive.

Options:

- Disabled (No 3 Mode drive installed)
- Drive A (3 Mode Drive installed in A:)
- Drive B (3 Mode Drive installed in B:)
- Both (3 Mode Drive installed in A: and B:)

### ■ Halt on

Tells the BIOS specifically which types of errors will halt the computer during the power-on self test (POST) section of the boot.

Options:

- No Errors (Never halt when an error is detected)
- All Errors (Halt whenever an error is detected)
- All, But Keyboard (Halt whenever an error is detected with the exception of the keyboard)
- All, But Diskette (Halt whenever an error is detected with the exception of the diskette)
- All, But Disk/Key (Halt whenever an error is detected with the exception of the diskette and keyboard) (default:All, But Keyboard)

### ■ Memory

When BIOS is displayed during POST, memory capacity is also displayed as shown below:

Base Memory, Extended Memory, Total Memory (the user can verify the accuracy of these values)

### 3.3. Advanced BIOS Features

- ※ Allows the configuration of advanced settings such as boot sequence, password check, etc.

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software  
Advanced BIOS Features

First Boot Device	[Floppy]	Item Help
Second Boot Device	[HDD-0]	Menu Level▶
Third Boot Device	[CDROM]	Select Boot Device priority
Password Check	[Setup]	
Boot to OS2 or DR-DOS	[No]	[Floppy] Boot from floppy
		[LS120] Boot from LS120
		[HDD-0] Boot from First HDD
		[HDD-1] Boot from Second HDD
↑↓→←: Move    Enter: Select    +/-/PU/PD: Value    F10: Save    ESC: Exit    F1: General Help F5: Previous Values    F6: Fail-Save Default    F7: Optimized Defaults		

#### ■ First / Second / Third Boot Device

The user can select the order in which the system will boot.

Options: Floppy, LS120, HDD-0~HDD3, SCSI, CDROM, ZIP, USB-FDD, USB-ZIP, USB-CDROM, USB-HDD, LAN, Disabled

#### ■ Password Check

Allows user to set a password. To remove the password entry requirement, enter SETUP and make sure there is no entry and then press <Enter>.

Options: System (Password entry is required during system start up and to enter CMOS SETUP)  
 Setup (Password entry is required to enter CMOS SETUP)(default: Setup)

#### ■ Boot to OS2 or DR-DOS

If you are running OS/2 or DR-DOS system with greater than 64MB of RAM, please set at "Yes".

Options: Yes, No (default: No)

### 3.4. Integrated Peripherals

- ※ This menu allows you to control the various ports of the computer such as IDE, SATA, USB, IEEE1394, COM port, LPT port, AC97 audio, etc.

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#### Integrated Peripherals

		Item Help
OnChip IDE Channel0	[Enabled]	Menu Level▶
OnChip IDE Channel1	[Enabled]	
AC97 Audio	[Auto]	
USB 1.1 Controller	[Enabled]	If a hard disk controller card is used, set at Disabled
USB 2.0 Controller	[Enabled]	
USB Keyboard Support	[Disabled]	
USB Mouse Support	[Disabled]	
Onboard H/W LAN	[Enabled]	[Enabled]
Onboard LAN Boot ROM	[Disabled]	Enable onboard IDE channel
Onboard Serial Port 1	[3F8/IRQ4]	
Onboard Serial Port 2	[2F8/IRQ3]	
Onboard Parallel Port	[378/IRQ7]	
Parallel Port Mode	[SPP]	[Disabled]
Game Port Address	[201]	Disable onboard IDE channel
Midi Port Address	[Disabled]	
x Midi Port IRQ	5	

↑↓→←: Move    Enter: Select    +/-/PU/PD: Value    F10: Save    ESC: Exit    F1: General Help  
F5: Previous Values    F6: Fail-Save Default    F7: Optimized Defaults

#### ■ OnChip IDE Channel 0

Allows the user to enable or disable the first onboard IDE channel (default:Enabled)

#### ■ OnChip IDE Channel 1

Allows the user to enable or disable the second onboard IDE channel (default:Enabled)

#### ■ AC97 Audio

Allows the user to use the onboard AC97 audio (default:Auto)

#### ■ USB 1.1 Controller

Allows the user to enable or disable the onboard USB 1.1 (default:Enabled)

#### ■ USB 2.0 Controller

Allows the user to enable or disable the onboard USB2.0 (default:Enabled)

#### ■ USB Keyboard Support

Allows user to use a USB-based keyboard (Enable if you are using a USB keyboard, otherwise Disable) (default:Disabled)

#### ■ USB Mouse Support

Allows user to use a USB-based mouse (Enable if you are using a USB mouse, otherwise Disable) (default:Disabled)

#### ■ Onboard H/W LAN

Allows the user to enable or disable the onboard LAN (default:Enabled)

#### ■ Onboard LAN Boot ROM

Allows user to enable or disable booting from a network drive (default:Disabled)

**■ Onboard Serial Port 1**

Allows the user to enable or disable the first onboard serial port

Options: Auto, 3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3, Disabled (default:3F8/IRQ4)

**■ Onboard Serial Port 2**

Allows the user to enable or disable the second onboard serial port

Options: Auto, 3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3, Disabled (default:2F8/IRQ3)

**■ Onboard Parallel Port**

Allows the user to enable or disable the onboard parallel port.

Options: 378/IRQ7, 278/IRQ5, 3BC/IRQ7, Disabled (default:378/IRQ7)

**■ Parallel Mode**

Use this to select the operation mode for the parallel port.

Options: SPP (normal)

EPP (Enhanced Parallel Port)

ECP (Extended Capabilities Port)

ECP+EPP (both ECP and EPP) (default:SPP)

**■ Game Port Address**

Allows the user to select the Game Port Address

Options: 201, 209, Disabled (default:201)

**■ Midi Port Address**

Allows the user to select the Midi Port Address

Options: 300, 330, Disabled (default:Disabled)

**■ Midi Port IRQ**

Allows the user to select the Midi Port IRQ

Options: 5, 10 (default:5)



### 3.5. Power Management Setup

- ※ This is used to control the various power saving features of the PC.

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Power Management Setup

		Item Help
ACPI Suspend Type	[S1(POS)]	Menu Level▶
x USB Device Wake-Up From S3	Disabled	[S1]
Power LED in S1 state	[Blinking]	Set suspend type to
Soft-Off by PWR-BTIN	[Instant-Off]	Power On Suspend under
AC BACK Function	[Soft-Off]	ACPI OS
Keyboard Power On	[Disabled]	
Mouse Power On	[Disabled]	
PME Event Wake Up	[Enabled]	[S3]
ModemRingOn/WakeOnLan	[Enabled]	Set suspend type to
Resume by Alarm	[Disabled]	Suspend to RAM under
x Date (of Month) Alarm	Everyday	ACPI OS
x Time (hh:mm:ss) Alarm	0 : 0 : 0	

↑↓→←: Move    Enter: Select    +/-/PU/PD: Value    F10: Save    ESC: Exit    F1: General Help  
F5: Previous Values    F6: Fail-Save Default    F7: Optimized Defaults

#### ■ ACPI Suspend Type

Allows user to select the Advanced Configuration and Power Interface(ACPI) as S1/POS (Power On Suspend) or S3/STR(Suspend To RAM) (default:S1/POS)

#### ■ USB Device Wakeup From S3

Allows user to use a USB device to wakeup system from S3.(default:Disabled)

#### ■ Power LED in S1 state

Allows user to select the system LED status in the S1 (POS - Power On Suspend) state.

Options:    Blinking (LED will blink)

Dual/OFF (When selecting this, the LED will turn off for a single-colored LED or change color for a dual-colored LED)(default:Blinking)

#### ■ Soft-off by PWRBTN

Controls whether the PC shuts off immediately after hitting the power button or delaying a few seconds. (default:Instant-off)

Options:    Instant-off (PC shuts off immediately)

Delay 4 Sec. (PC shuts off after a 4sec. delay)

#### ■ AC BACK Function

Allows user to select system status when power is removed and returned.

Options:    Memory (return prior to power removal)

Full-On (return to full system power)

Soft-Off (use of Soft PWR button to power on system)(default:Soft-Off)

#### ■ Keyboard Power On

Allows user to turn on system using the keyboard.

Options:    Password (input an 8 character long password)

Keyboard 98 (the power button on Windows 98 keyboard)

Disabled (default:Disabled)

### ■ Mouse Power On

Allows user to turn on system using the mouse. (default:Disabled)

### ■ PME Event Wake Up

Allows user to select the Power Management Event (PME) wake up function which requires the system to have a +5VSB power supply using a rate of 1A or less. (default:Enabled)

### ■ ModemRingOn/WakeOnLan

To use this feature, an Ethernet card supporting the PCI2.2 or newer standard must be used. (default:Enabled)

### ■ Resume by Alarm

If set to Enabled, the user can set the date and time for automatic system power-on. (default:Disabled)

Settings:

Date (of Month) Alarm : Everyday, 1~31

Time (hh: mm: ss) Alarm : (0~23) : (0~59) : (0~59)

## 3.6. PnP/PCI Configuration

- ※ This menu allows you to configure your PCI slots. You can assign IRQ's for various PCI slots.

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software  
PnP/PCIConfigurations

PC11/PCI5 IRQ Assignment	[Auto]	Item Help
PC12 IRQ Assignment	[Auto]	Menu Level▶
PC13 IRQ Assignment	[Auto]	Device(s) using this INT:
PC14 IRQ Assignment	[Auto]	USB 1.1 Host Cntrl -Bus 0 Dev 16 Func 1
↑↓→← : Move    Enter: Select    +/-/PU/PD: Value    F10: Save    ESC: Exit    F1: General Help F5: Previous Values    F6: Fail-Save Default    F7: Optimized Defaults		

### ■ PCI1/PCI5 IRQ Assignment

Allows you to assign an IRQ for the first/fifth PCI slot. Options:Auto,3,4,5,7,9,10,11,12,14,15 (default:Auto)

### ■ PCI2 IRQ Assignment

Allows you to assign an IRQ for the second PCI slot. Options:Auto,3,4,5,7,9,10,11,12,14,15 (default:Auto)

### ■ PCI3 IRQ Assignment

Allows you to assign an IRQ for the third PCI slot. Options:Auto,3,4,5,7,9,10,11,12,14,15 (default:Auto)

## ■ PCI4 IRQ Assignment

Allows you to assign an IRQ for the fourth PCI slot. Options:Auto,3,4,5,7,9,10,11,12,14, 15 (default:Auto)

## 3.7. PC Health Status

- ※ This menu displays the current CPU temperature, the fan speeds, voltages etc.

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### PC Health Status

Vcore	1.548V	Item Help
DDR Vtt	1.280V	Menu Level▶
+3.3V	3.232V	
+5V	4.919V	
+12V	12.239V	
Current System Temperature	30°C	
Current CPU FAN Speed	4687 RPM	
Current System FAN Speed	0 RPM	
CPU FAN Fail Warning	[Disabled]	
System FAN Fail Warning	[Disabled]	
CPU Shutdown Temperature	[Disabled]	
Current CPU Temperature	51°C/110°F	
↑↓↔←: Move    Enter: Select    +/-/PU/PD: Value    F10: Save    ESC: Exit    F1: General Help F5: Previous Values    F6: Fail-Save Default    F7: Optimized Defaults		

## ■ Current Voltage(V) Vcore / DDR Vtt / +3.3V / +5V / +12V

Automatically checks system voltage

## ■ Current System Temperature

Automatically checks system temperature

## ■ Current CPU/System FAN Speed (RPM)

Automatically checks CPU/SYSTEM fan speed

## ■ CPU/System FAN Fail Warning

Allows system warning of CPU/SYSTEM fan failure (default:Disabled)

## ■ CPU Shutdown Temperature

Allows system shutdown if the CPU temperature is over than 110°C

Options: Enabled, Disabled (default:Disabled)

## ■ Current CPU Temperature

Automatically checks CPU temperature

## 3.8. Frequency/Voltage Control

- ※ This allows user to configure CPU frequency and voltage settings.

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software  
Frequency/Voltage Control

Spread Spectrum	[Enabled]	Item Help
CPU Host Clock Control	[Disabled]	Menu Level▶
※ CPU Host Frequency (MHz)	100	
※ PCI/AGP Host Frequency (MHz)	33/66	
DRAM Clock (MHz)	[Auto]	
CPU OverVoltage Control	[Auto]	
AGP OverVoltage Control	[Auto]	
DIMM OverVoltage Control	[Auto]	
high: Move      Enter: Select      +/-/PU/PD: Value      F10: Save      ESC: Exit      F1: General Help		
F5: Previous Values      F6: Fail-Save Default      F7: Optimized Defaults		

- ※ This section is very dangerous for inexperienced users, and therefore it is not recommended that these settings be altered. An incorrect setting can result in system instability, corrupt data, or permanent hardware damage.

### ■ Auto Detect PCI/DIMM Clk

Allows system to automatically detect PCI/DIMM Clk (default:Enabled)

### ■ Spread Spectrum

Allows user to use the Spread Spectrum function (default:Enabled)

### ■ CPU Host Clock Control

Allows user to use CPU Host Clock Control (default:Disabled)

Please note that if your system is overclocked and cannot restart, please wait 20secs. for automatic system restart or clear the CMOS setup data and perform a safe restart.

### ■ CPU Host Frequency (MHz)

If you wish to use this feature, please set the "CPU Host Clock Control" to Enabled. If this feature is disabled, the currently CPU frequency will be displayed.

The CPU Host Clock can be input between 100MHz to 132MHz.

### ■ PCI/AGP Frequency (MHz)

The PCI/AGP frequency is based on the CPU Host Frequency (Mhz) setting.

### ■ DRAM Clock (MHz)

Allows user to adjust the DRAM clock frequency. (default:Auto)

Please note that if the DRAM clock frequency is incorrectly set, the system will be unable to start. You can use the clear CMOS method to return the system to its default settings.

Options: Auto (automatically set by system)

133-DDR266 (Select this option if DDR266 memory is used)

166-DDR333 (Select this option if DDR333 memory is used)

### ■ CPU OverVoltage Control

Allows user to set the CPU voltage. (default:Auto)

Please note that by overclocking your system through the increase of the CPU voltage, system instability or damage to the CPU may occur.

Options: Auto (automatic setting of CPU voltage as CPU required)  
+5%, +7.5%, +10% (CPU voltage range)

### ■ AGP OverVoltage Control

Allows user to set the AGP voltage. (default:Auto)

Please note that by overclocking your system through the increase of the AGP voltage, system instability or damage to the AGP card may occur.

Options: Auto (automatic setting of AGP voltage at 1.5V)  
+0.1V ~ +0.3V (AGP voltage range)

### ■ DIMM OverVoltage Control

Allows user to set the DIMM voltage. (default:Auto)

Please note that by overclocking your system through the increase of the DIMM voltage, damage to the memory may occur.

Options: Auto (automatic setting of DIMM voltage at 2.5V)  
+0.1V ~ +0.3V (DIMM voltage range)

## 3.9. Load Fail-Safe Defaults

- ※ Use this option to reset your BIOS settings to the system defaults. You should only use this if you are encountering serious problems.  
Please select <Y> and <Enter> to load Fail-Safe defaults. Once this is loaded, your system may be slowed since this uses a minimal performance setting to allow stable system running.

## 3.10. Load Optimized Defaults

- ※ Like the Fail-Safe mode above, this option loads the BIOS default settings, but runs the system at optimal performance.  
Please select <Y> and <Enter> to load optimized defaults.

## 3.11. Set User Password

- ※ Use this to set the password that is needed to either enter into the BIOS or to boot the system. Entering in a blank field will disable the password.  
Please input an 8 character long password and then select Enter. You will be required to re-enter the password for confirmation. If you wish to remove the need for password entry, leave the entry blank and then select Enter. BIOS will then display "PASSWORD DISABLED". Once you have completed the password setting, you will need to go to "Advanced BIOS Features" and select "Password Check" for setup of password check.

### 3.12. Save & Exit Setup

- ※ To save any changes you made to the BIOS you must choose this option. The system will automatically exit setup and perform a system restart. Pushing <F10> will have the same effect.  
Push <Y> and <Enter> to save and exit setup. If you do not wish to save, select <N> or <Esc> to return to the main menu.

### 3.13. Exit Without Saving

- ※ Use this option instead of the one above if you wish to exit the BIOS without saving the changes you have made. Pushing <ESC> will have the same effect.  
Push <Y> and <Enter> to exit setup. You can return to the main menu by pushing <N> or <Esc>.

## 4. Driver Installation

Driver installation for the Windows 98/98SE/200/ME/XP operating systems is simple. Once you insert the provided driver disks into your optical drive, the AUTORUN screen will appear. If this screen does not appear, you can use "D:\setup.exe" (with "D" being the specified drive) to bring up the screen shown below. Just follow the screen instructions to easily complete driver installation.

